TS1GPA1024U5

172PIN DDR2 533 Micro-DIMM
1024MB With 64Mx16 CL4

Description

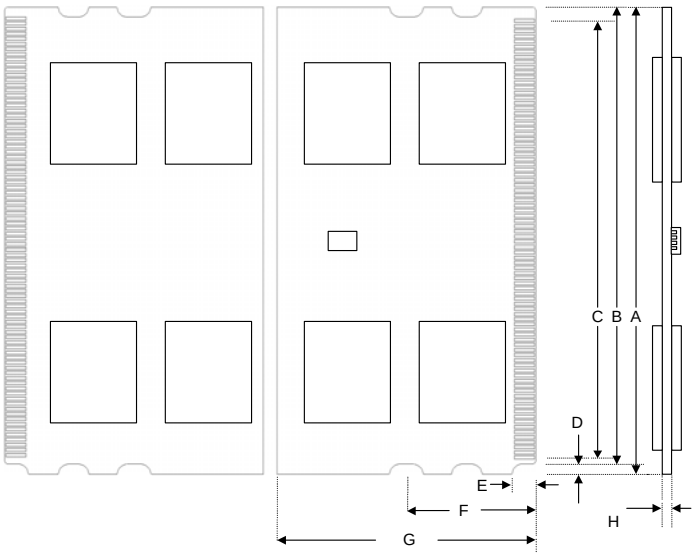
The TS1GPA1024U5 is a 128M x 64bits DDR2-533 Micro-DIMM. The TS1GPA1024U5 consists of 8pcs 64Mx16bits DDR2 SDRAMs in 92 ball FBGA packages and a 2048 bits serial EEPROM on a 172-pin printed circuit board. The TS1GPA1024U5 is available as non-ECC module in 2-row 128Mx64 organization and is intended for mounting into 172-pin edge connector sockets.

Synchronous design allows precise cycle control with the use of system clock. Data I/O transactions are possible on both edges of DQS. Range of operation frequencies, programmable latencies allow the same device to be useful for a variety of high bandwidth, high performance memory system applications.

Features

- RoHS compliant products.
- JEDEC standard 1.8V ± 0.1V Power supply
- VDDQ=1.8V ± 0.1V
- Max clock Freq: 267MHZ; 533Mb/s/Pin.
- Posted CAS
- Programmable CAS Latency: 3,4,5
- Programmable Additive Latency :0, 1,2,3 and 4
- Write Latency (WL) = Read Latency (RL)-1
- Burst Length: 4,8(Interleave/nibble sequential)
- Programmable sequential / Interleave Burst Mode
- Bi-directional Differential Data-Strobe (Single-ended data-strobe is an optional feature)
- Off-Chip Driver (OCD) Impedance Adjustment
- MRS cycle with address key programs.
- On Die Termination
- Serial presence detect with EEPROM

Placement



PCB: 09-2420

Dimensions

Side	Millimeters	Inches
A	45.50 ± 0.20	1.791 ± 0.008
B	44.50	1.752
C	42.50	1.673
D	1.00	0.039
E	2.75± 0.10	0.108± 0.004
F	15.00	0.591
G	30.00± 0.20	0.984± 0.008
H	0.80 ± 0.10	0.031 ± 0.004

(Refer Placement)

Pin Identification

Symbol	Function
A0~A12, BA0~BA2	Address input
DQ0~DQ63	Data Input / Output.
DQS0~DQS7	Data strobe
/DQS0~/DQS7	Differential Data strobe
CK0, /CK0	Clock Input.
CKE0, CKE1	Clock Enable Input.
ODT0, ODT1	On-die termination control line
/CS0, /CS1	Chip Select Input.
/RAS	Row Address Strobe
/CAS	Column Address Strobe
/WE	Write Enable
DM0~DM7	Data-in Mask
VDD	+1.8 Voltage power supply
VDDQ	+1.8 Voltage Power Supply for DQS
VREF	Power Supply for Reference
VDDSPD	Serial EEPROM Positive Power Supply
SCL	Serial PD Clock
SDA	Serial PD Add/Data input/output
VSS	Ground
NC	No Connection